

# MIOSHA news

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Michigan Occupational Safety and Health Act (MIOSHA)

Winter 2001

## Owner Guilty in Worker's Death

*Owner Edmond Woods and Midland Environmental Services, Inc., Plead Guilty to Attempted Involuntary Manslaughter in an Explosion which Killed One Worker*

On Nov. 1, 2000, Michigan Department of Consumer and Industry Services (CIS) Director **Kathy Wilbur** announced the resolution of the criminal prosecution against Edmond D. Woods, Owner, and Midland Environmental Services, Inc., in the 1994 fatality of employee, **Mickiel J. Renneberg**. This case is unprecedented because it is the first criminal case in Michigan history where an owner was held criminally responsible for a workplace fatality.

Sentences were handed down in Gladwin County Circuit Court against Edmond Woods and Midland Environmental Services, Inc. on Dec. 19, 2000. Woods received: Five year's probation, payment of the full statutory fine of \$17,500, and 200 hours of community service. The corporation also was required to pay the full fine of \$17,500, for a combined total of \$35,000. Both Woods and the corporation were also required to abide by all MIOSHA and DEQ (Department of Environmental Quality) laws, and must also abide by all the terms of the MIOSHA Settlement Agreement. The guilty pleas carried a maximum criminal fine of \$35,000 combined, and a maximum possible prison term of five years.

"It can't be stated strongly enough: Michigan employers are ultimately responsible for the safety of their workers on the job," said Director Wilbur. "Edmond Woods consistently and blatantly ignored basic MIOSHA regulations, and refused to provide a work environment free from hazards. This case should be a clear signal to employers that they are legally obligated to provide a safe and healthy work environment."

The CIS Bureau of Safety and Regulation is responsible for administering the Michigan Occupational Safety and Health Act (MIOSHA).

In Gladwin County Circuit Court Edmond D. Woods and Midland Environmental Services entered the following guilty pleas:

- To attempted involuntary manslaughter, on behalf of Woods personally,
- To attempted involuntary manslaughter, on behalf of the Corporation,
- To the charge regarding the MIOSHA Willful Criminal, on behalf of Woods personally,
- To the charge regarding the MIOSHA Willful Criminal, on behalf of the Corporation.

"We are deeply saddened by the needless death of Mickiel Renneberg and hope this resolution will offer some consolation to the family," said Wilbur. "We also hope it will help prevent future workplace injuries and fatalities, which is the ultimate goal of the MIOSHA program—by alerting employers that we will not tolerate the placing of workers in harm's way."

### Accident Details

Edmond D. Woods, President, and Midland Environmental Services, Inc., conduct the business of removal and demolition/dismantling of under-

*Cont. on Page 18*

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*This service truck was damaged when Midland Environmental Service employees were thrown into it by the force of the tank explosion.*



**Serving Michigan...Serving You**  
**Consumer & Industry Services**

## From the Bureau Director's Desk

*By: Douglas R. Earle, Director  
Bureau of Safety & Regulation*



## Employer Responsibility for Workplace Safety & Health

MIOSHA representatives often ask themselves when investigating a fatality or serious injury accident why the MIOSHA law didn't prevent this tragedy? On occasion family members, representatives of the accidents, or politicians also want to know why MIOSHA didn't prevent "that" from happening. "If only MIOSHA had inspected the worksite," is often the implication. We have a tremendously dedicated staff. We can, however, only contribute to and compliment the efforts of employers and employees to attain a safe and healthful work environment. Whether it is a MIOSHA standard, a compliance inspection, a consultation visit, safety and health education and training programs or materials—the **responsibility for a safe and healthful worksite by law is that of the employer.**

Both MIOSHA and federal OSHA laws are premised on the employer being primarily responsible for workplace safety and health, not the governmental organization that administers the occupational safety and health requirements and services. Two recent cases provided renewed focus on employer responsibility; the first case dealt with a construction fatality; the second with a manufacturer who refused to safeguard dangerous machinery, following MIOSHA interventions in the form of compliance inspections and consultation services.

### **A Construction Case – Contractor Criminally Liable**

As we reported on page 1, the MIOSHA fatality investigation of Midland Environmental Services resulted in the issuance of several civil citations for willful violations of MIOSHA requirements. An employee was killed and two others seriously injured while removing and opening an underground petroleum storage tank. The case, as are all fatality investigations that result in willful serious citations, was referred to the Attorney General for consideration regarding possible criminal liability under MIOSHA and/or the general state criminal statutes. The Attorney General's office found that there were sufficient grounds for charging the company, as well as the owner, with criminal violations of MIOSHA and state criminal statutes.

The charges were brought in the Gladwin County Circuit Court. The outcome of the case was a guilty plea by the employer on behalf of himself and the corporation to two counts of attempted involuntary manslaughter and two counts of violations of Section 35a(5) of MIOSHA, which is the criminal sanction for willful violations that cause the death of an employee. The sentencing took place on Dec. 19, 2000. The owner received five years probation and 200 hours of community service. The owner and the corporation paid the full combined statutory fine of \$35,000, and were required to abide by all MIOSHA and DEQ laws. The employer also agreed to pay a reduced civil penalty and to additional conditions, including reporting worksite operations to MIOSHA.

### **Manufacturing – Section 45 Cease Operations Order**

In the case of manufacturing, MIOSHA conducted an accident investigation at Copco Door Co., Ferndale, based on an arm amputation. Because of serious plant conditions the inspection was expanded

to a "wall-to-wall" investigation of the entire facility. Several serious machine guarding violations were cited. Initially the employer appealed the citations and requested an extension of the abatement dates. After several unsuccessful attempts by MIOSHA to obtain compliance and abatement of the hazards it was recommended that a "cease operations order" be issued pursuant to Section 45 of MIOSHA.

While many are familiar with "imminent danger cease operation orders" under Section 31 of MIOSHA, few realize that the Section 45 cease operations order authority exists. For good reason it has been little utilized in the history of the modern MIOSHA law. It provides that in a case where there continues to be a refusal to comply on the part of the employer, MIOSHA representatives may seek approval to issue a cease operations order. Unlike Section 31 regarding imminent danger cease operation orders, Section 45 does not place similar specific constraints on the issuance of orders under its provisions. We have, however, adopted the same processes in the issuance of Section 45 orders as are required by law under Section 31. Primary among the internal procedures, is the acquisition of the Department Director's approval for issuing the Section 45 cease operations order before it is served on the employer.

In this case, on Sept. 11, 2000, CIS Director Kathy Wilbur authorized the issuance of a Section 45 cease operations order that resulted in MIOSHA representatives "tagging out" 12 power presses with "cease operations" order tags and serving the employer with a "cease operations order." The employer was notified that they could not operate the machines until the hazards were eliminated by properly guarding them to avoid employee exposure. The employer also received additional failure to abate citations along with a substantial civil penalty. The cease operation order, however, was based upon the citations issued in the initial accident and wall-to-wall investigation, which had become final (not subject to any further appeal). Within a few days representatives of the company contacted MIOSHA and informed us that they believed they were now in compliance. They requested that we return and confirm their compliance and remove the cease operation tags from the machines. At this writing all but two of the machines are properly guarded and the cease operation tags have been removed by MIOSHA.

These two recent cases highlight the underpinnings of the MIOSHA law that provides that the employer has the ultimate responsibility to assure a safe and healthful workplace. Under MIOSHA the law also provides that employees also have a duty to comply with MIOSHA requirements, however, civil sanctions under the law apply only to employers - not employees. MIOSHA provisions, whether regulatory or voluntary services, are intended to encourage and support the employer's responsibility to maintain a safe and healthy work environment. Bottom line—the employer and employees at a worksite determine whether it is safe—not MIOSHA.

*Douglas R. Earle*

# AMPUTATIONS

## These Accidents Can Be Prevented

By: Linda Long  
CET Safety Consultant

"It felt like I stuck my fingers in a light socket. I held the artery. A guy came over to help, but... he passed out. I managed to get myself to the office and was taken to the hospital." This is how **Earl Flynn** describes the accident that crushed his left wrist between the die posts of a power press resulting in the amputation of his left hand.

In 1998, Michigan employees suffered 416 workplace-related amputations. Earl's devastating accident was completely preventable, as are the majority of all workplace amputations. The power press Earl was operating was being fed by hand, activated with a foot pedal, and had no guards or devices in place. This is the type of accident that MIOSHA's Strategic Plan has targeted to reduce, if not eliminate.

Physicians describe Earl's condition as the "perfect amputation," because what remains is the perfect amount of arm to take a prosthesis. I hope we all agree that the only condition that is perfect is one where everyone goes home each day with all their fingers, hands, arms, feet, and toes. MIOSHA Strategic Plan Goal 1.1A mandates that MIOSHA use a combination of enforcement, outreach, voluntary assistance, and innovative partnering with industry to reduce the number of amputations 15 percent by 2003. MIOSHA cannot accomplish this important goal without the involvement and cooperation of the Michigan employers and employees. Interestingly enough, there is a simple formula that can be used to accomplish this goal.

### A Formula to Prevent Injuries

Act 154, the MIOSHA act, presents a formula to prevent injuries which has been proven effective time and time again. The **first factor** requires that employers **provide** a means to be safe. This includes things like guards, devices, personal protective equipment, programs and procedures (lock out, unjamming, etc.). The **second factor** requires that an employer adequately **train** employees how to work safely. Training must be specific to the steps of the job, the hazards (amputation), and the safeguards. Good training requires that employees demonstrate that they can do the job safely. The **third and fourth factors** go hand in hand, as they require that there be adequate **supervision** to **ensure** that employees utilize the equipment and **comply** with the training.

It's evident that Earl's amputation occurred

because the point of operation on the press was not guarded. Point of operation means the area of the die where material is actually positioned and work is being performed during any press activity, such as shearing, punching, forming, or assembling. No machine guarding or inadequate guarding is recognized as a common cause of many amputations.

Another common factor is lock out...or not locking out. A few years ago, **April Klein** was operating a thread roller. A bolt fell into the machine. Following her training, she hit the emergency stop button. After the machine stopped she reached in to retrieve the part. The hidden eccentric shaft stopped with the heaviest portion on top. As she reached in to retrieve the part, gravity caused the shaft to rotate, causing the die to move, amputating her left index finger. A **lock-out procedure** would have identified the eccentric shaft as a power source and required some kind of locking/blocking to take place. Even though April insisted on immediately getting back to work, it took her a year to feel comfortable enough to operate that machine again.

### It All Comes down to Choices

Employers and employees must choose to be safe. This is never more true than when operators are required to do multi-tasking, that is, in addition to operating the equipment, they also perform set-up, tool/die repair, or unjamming parts or scrap. Each year numerous amputations happen when operators depend on machine safeguarding, such as light curtains or two-hand controls, to perform a non-production operation. Properly adjusted light curtains are adequate for production safeguarding, but if it's necessary for the operator to put their hands in the die of a press (mechanical or hydraulic) to service or maintain the die, light curtains no longer offer adequate protection.

During a non-production operation, there must be a procedure to prevent the press from cycling and a safety block must be put into place to prevent the ram from drifting down on a body part. An interlocked safety block would fulfill this requirement, as would locking out the press and using a safety block. An adequate procedure must be developed and the means to accomplish it provided by the employer. Operator training then

must be performed. Most operators are intent on making the expected amount of good parts, so they do what it takes to accomplish that. Unless it is clearly expressed and upheld by the employer, that the safe way is the only way, operators may choose to do things the fastest way.

**Employers choose** whether to provide methods to be safe and train their employees—or they **choose** to rest on their luck, thinking, "We've never had a serious accident like that." **Employees choose** to ignore safety procedures because, "It'll never happen to me"—or they **choose** to use the safeguards provided, even though they're a bit inconvenient, mess up their hair, or aren't macho. **Employers**, in turn, **choose** whether they will hold those they employ, at all levels, accountable—rather than reduce the safety director's role to playing "safety cop." **MIOSHA chooses** to increase its efforts to reduce amputations from occurring in the workplace by targeting enforcement activities to those SIC codes where amputations most often occur, and by concentrating CET efforts to get the word out.

During implementation of the strategic plan, in response to any reported amputation, MIOSHA enforcement will, minimally, conduct an accident investigation and a "focused inspection" covering the following areas: machine guarding, operator training, and lockout programs and procedures. To help the employer be proactive in preventing amputations, the **CET Division** has training materials and seminars that mirror the focused inspection. Please check our website: [www.cis.state.mi.us/bsr](http://www.cis.state.mi.us/bsr) or call **517.322.1809** for compliance help. ■



*This machine operator is shaping a steel bar, and is protected by a guard and pull back devices.*



# PREVENTING WORKPLACE

## Creating a Workplace Safety Culture

By: Sheila Ide  
CET Supervisor

To paraphrase an old presidential campaign, "It's about preventing accidents stupid!" Harsh words perhaps, but sometimes we get so engrossed in the mechanics of preventing accidents we forget why we need to do so in the first place.

Getting back to basics is not a bad thing. Think about some of those safety posters: "Take The Time To Be Safe," "Remember, Machines Don't Think," "Safety First Always and All Ways," "Don't Learn Safety...Accidently," "You're Important To Us...We're Important To You." **Employer Responsibility-Employee Participation**

But of course, slogans do not make us safe, they are only reminders. Let's talk about a couple of controversial subjects: **employer commitment** and **responsibility**, coupled with **employee acceptance** and **participation**. Yes, it takes both sides of the equation to make safety more than a set of cliches.

If employees do not see their employer put the same emphasis on safety as they do production, employees will focus on production. When employers do not consistently enforce safety rules, employees will not take the rules seriously. Not because an employee wants to have an accident, but because they find it hard to believe anything will happen to them, especially if their employer does not reinforce their words with action in making safety an integral part of

each job assignment.

According to the Heinrich ratio of accident progression, there is plenty of warning before a serious or lost-time illness or injury occurs. Upon survey of 90,000 incidents resulting in injury or property damage or both, it was found that there will be 500 property damage accidents and 100 minor injuries for every single lost-time or serious injury/accident.

With preliminary data like that, why are there so many serious injuries or deaths in the workplace? Maybe, because we do not recognize the pattern or understand the relationship between job task and unintended accident or injury. We do not recognize or report those incidental types of events where there was a close call and nothing really happened or the property was damaged but no one was injured. However, the underlying issue is that a mistake occurred which, this time, did not lead to an injury. So how do employers train themselves to recognize the pattern?

### Creating a Safety Culture

Many companies use **Job Safety Analysis**. A process whereby the job task is broken down into steps and each potential for injury is examined and safeguarded. For instance; a grinding operation will require eye protection for flying particles.

Other companies use a program for reporting **Near Miss** incidents. This type of program documents those "close call" types of situations where no one was hurt...this time. These reports can be submitted anonymously. However, it is im-

perative that the company take the situation seriously, fix the potential problem, and provide feedback to the employees.

**Proper orientation and ongoing training** are crucial to creating and maintaining a safety culture. New employees must be shown the importance of safely performing their job tasks before they even begin their work. Supervisors and employees should be provided continuing training and reinforcement throughout their career which emphasizes that safe and productive work

practices are complimentary as well as expected.

**Enforcement** of safety rules is imperative but the employer must also advocate that best safety practices are always the accepted method and short cuts that disregard safety will not be tolerated. A written safety program that is implemented and understood by each employee is the one of the best weapons against accidental injury or property damage.

The real issue of course, is that safety must be incorporated into every action an employee takes. There is no question that people are willing to live with a certain amount of risk in their lives—which would explain bungee jumping, drinking and driving, and doing home repairs with unguarded power tools.

However, we cannot allow employees to take risks in the workplace. In fact the MIOSHA Act states, "An employer shall: (a) Furnish to each employee, employment and a place of employment which is free from recognized hazards that are causing, or are likely to cause, death or serious physical harm to the employee" (408.1011, Sec.11). Death or serious physical harm yes, however we need to eliminate the band-aid injury as well.

### Measuring the Cost

How do you calculate the cost to the employer? Take a so-called simple accident. A press cutter operator cuts his hand on the cutting edge razor. A quick trip to the medical center, possibly a butterfly suture and back to work in a couple of hours. Low cost right? Wrong! The employer must also take into account the downtime of the machine (5,000 sheets an hour = loss of 10,000 sheets production at two cents each=\$200); time spent in transport of the employee, time spent by various individuals involved in investigation and report writing, possible training costs of another less productive employee on the task; production delays for the binding employees, etc. This \$50 accident just went up to \$1,000. Multiply that cost by the incident occurring a couple times a month among six press cutter operators and you have losses in the ten's of thousands!

After the first incident, an investigation would have revealed that operators routinely test the sharpness of the blade with their hands! Fix every issue the first time should be the norm, not the exception. A thorough and complete **investigation** should be an integral part of every incident.

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CET Onsite Consultant John Hodgson and Russ Norkoli, Safety Coordinator, H & H Tube Manufacturing Co., discuss an air monitoring program.

# INJURIES & ILLNESSES

## Developing a Safety & Health Program

By: Debra Gundry  
CET Safety Consultant

One of the most tragic events in the workplace occurs when an employee is killed or seriously injured on the job. While such a tragedy is immeasurable in terms of human loss, it also takes a serious toll on the affected businesses, and can mean the difference between profit and loss to Michigan employers.

### Program Benefits

According to BSR Director **Doug Earle**, "The primary mission of MIOSHA is to ensure that every Michigan worker goes home healthy and whole every night!" MIOSHA has found that when businesses have a strong workplace safety and health program it has a very positive impact on their bottom line. Not only are accidents, injuries and illnesses reduced—the benefits of such a program also include: lower workers' compensation costs, increased productivity, increased employee morale, lower absenteeism, and less employee turnover.

A comprehensive safety and health program that protects employees takes employer commitment—of their time, energy and resources. But such a commitment can pay big dividends. Most companies can reduce injuries by 20 to 40 percent by establishing a safety and health program. Recent studies have estimated that safety and health programs save \$4 to \$6 for every dollar invested. Yet only about 30 percent of U.S. worksites have established these programs.

In a July 21, 1999, speech to the National Association of Manufacturers, OSHA Secretary **Charles Jeffress** said, "Establishing a safety and health program is the single most important thing any employer can do to prevent workplace injuries and illnesses."

### MIOSHA Commitment

MIOSHA is so committed to the importance of safety and health programs in the workplace, that one of the strategic plan performance goals is to ensure that: 50 percent of the employers in general industry who are targeted or request a MIOSHA intervention have either a written and implemented safety and health program or have improved their existing program. That means we will be recommending a safety and health program to every employer we contact.

Both compliance and outreach programs will emphasize this critical element of workplace safety and health. The evaluation of an employer's safety and health program will be a

part of every MIOSHA intervention. Companies will receive a Safety and Health Program Evaluation worksheet, as well as a sample written safety and health program, during MIOSHA inspections and investigations.

### Program Development

MIOSHA is also providing education and training on the development and implementation of safety and health programs, and will be integrating this as a standard topic in all Safety Administrator Courses and other pertinent seminars. When CET Consultants conduct hazard surveys, a safety and health evaluation will be part of the process.

We know that the prospect of creating a comprehensive safety and health program can seem overwhelming to employers. Many businesses have asked for a sample in order to develop their own program. I worked on the MIOSHA team that produced the materials to help companies develop a safety and health program. The team discovered that what we needed to do was put together a kit that employers can order from and then fine tune, to meet their specific needs.

The team recognized that businesses are unique and each company needs to tailor their own program and produce written safety and health procedures and rules to meet their specific work environment. Given the wide range of employer needs, the team created the kit with a program guideline which includes all of the necessary elements.

An effective safety and health program includes the five key elements listed below, with some sample activities for each element. These elements have been demonstrated to work even in companies that started with high injury and illness rates.

### Five Key Elements

**Management Commitment** is where it all begins. Management must commit to the fact that the safety and health of their workers is their number one priority. This commitment requires managing safety and health like other organizational concerns, integrating safety and health into the entire

organization, and assuming accountability for employee safety and health. Activities include:

- A written Safety and Health Program with duties and accountability;
- A designated safety and health person or department with duties and budget;
- Safety and health meetings conducted on a regular basis;
- Proactive steps taken by management to identify safety and health issues.

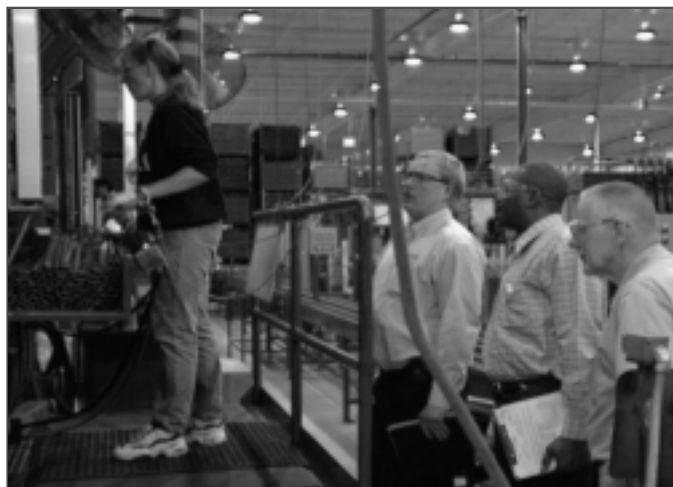
**Employee Involvement** is critical to establishing an effective program. Employees who believe their safety is a priority will accept responsibility for safety and pursue it in their work environment. Activities include:

- Employees represented on safety and health committees;
- Employees encouraged to report hazards to supervisors, with written actions taken;
- Employees have input on safety and health training.

A **Worksite Analysis** will be conducted by employers to recognize and understand the hazards and potential hazards of the worksite. Activities include:

- MIOSHA Log 200 properly maintained and required supplementary forms filled out;
- Accidents and near-misses investigated with corrective actions and follow-up;
- Ergonomics Analysis and Job Safety Analysis performed;
- Regular worksite inspections conducted to identify hazardous conditions.

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*CET Onsite Consultant Howard Simmons (center) conducts an onsite walk-through at Pullman Industries, Inc., with (from L.) Richard Kintigh, Safety Director, and Ed VanWy, UAW Local 1210-4 President.*

## Construction Safety

Only about four percent of Michigan's workforce is employed in construction. Construction fatalities, however, accounted for more than 40 percent of all MIOSHA program-related fatal workplace accidents over the last three years.

### 2000 Fatal Accidents By Major Cause\*

<b>Electrocution</b>	<b>7</b>
<b>Fall</b>	<b>8</b>
<b>Caught Between</b>	<b>6</b>
(Cave-in 2)	
<b>Struck By</b>	<b>1</b>
(Struck by Traffic 0)	
<b>Other</b>	<b>1</b>
(Explosion 1)	
<b>Total</b>	<b>23</b>

\* (As of 12/21/00)

The single most important thing construction employers can do to protect their employees is to have a comprehensive and implemented accident prevention program.

### MIOSHHA Accident Prevention Program Major Components

- Designate Qualified Person to Administer Program
- Train Employees in Assigned Tools & Equipment
- Inspect Site for Unsafe Condition and Correct Hazards
- Instruction in Recognition and Avoidance of Hazards (Tool Box Talks)
- Haz-Com, Confined Space Training
- Emergency Procedures

*The above components can be found in construction, Part 1, General Rules Standards.*

**Construction Safety Division**  
**517.322.1856**

# Partnership Renewed To Protect Road Workers

On Oct. 30, 2000, Michigan Department of Consumer & Industry Services (CIS) Director **Kathy Wilbur** announced the renewal of the partnership between CIS, the Michigan Road Builders Association (MRBA), and the Michigan Occupational Safety and Health Administration (MIOSHHA). The three organizations officially became partners to improve worker safety and health in the road and bridge industry in 1998.

The construction industry is one of the most hazardous industries in Michigan. Only about four percent of Michigan's workforce is employed in construction—however, construction fatalities account for more than 40 percent of all fatal workplace accidents. And road and bridge construction is the most hazardous construction activity.

"Since we first signed this partnership, there has been a tremendous increase in road construction, however, road construction fatalities have not seen a comparable increase," **Wilbur** said. "We truly believe our combined efforts in this landmark partnership have contributed greatly to a safer work environment for road and bridge construction workers in Michigan."

The CIS Bureau of Safety and Regulation (BSR) is responsible for administering the MIOSHA Act. Establishing partnerships with the private sector is a key MIOSHA strategy to help protect Michigan workers.

"During our second full year of the partnership, we have identified and initiated many activities that have benefitted both parties. With our ongoing open lines of communication, this will only continue to grow," said **Mike Eckert**, MRBA Director of Safety Services. "Ultimately however, it's the safety of the hard working men and women in the highway construction industry who have received the greatest benefit."

The formal partnering charter has 10 goals, including to: promote worker safety through education, training, and ongoing communication; increase the use of joint forums

to discuss issues which affect safety regulations in road construction; conduct joint meetings to discuss pertinent and /or urgent issues; and continually stimulate positive cultural change in both organizations to promote worker safety, to save lives, and to prevent injuries and illnesses.

"Since 1998, this formal partnership has achieved some outstanding results," said CIS Deputy Director **Kalmin Smith**. "One of the most significant achievements is a recent compliance directive which clarifies the requirements when employees must ride moving equipment to install and remove traffic control devices. This directive is a major tool to help protect employees during an essential, but potentially hazardous job activity."

While participation by individual employers is voluntary, CIS anticipates that contractors, who embrace the goals of the partnership



*Asphalt paving, a common site on Michigan highways during the construction season.*

and who strive to provide a safe and healthy workplace, will experience a decrease in workplace accidents and illnesses, and a decrease in workers' compensation costs.

The partnership was signed by: **Kalmin Smith**, Ph.D., CIS Deputy Director; **James Klett**, MRBA President; **Douglas Earle**, BSR Director; **David Zynda**, MRBA President Elect; **Douglas Kalinowski**, BSR Deputy Director; **Anthony Milo**, MRBA Executive Vice President; **Richard Mee**, Chief, BSR Construction Safety Division; and **Michael Eckert**, MRBA Director of Safety Services.

The signing took place during the 2<sup>nd</sup> annual MIOSHA/MRBA partnership review meeting held in October in Lansing. ■



# The Bottom Line

## Workplace Safety and Health Makes Good Business Sense

### Brass Craft Manufacturing - Brownstown Plant

#### Work-Comp Costs Drop Dramatically

Brass Craft Manufacturing Company's Brownstown Plant, a Masco Corp. subsidiary, has significantly reduced work-related injuries, resulting in a dramatic reduction of workers' compensation costs—from **\$250,000 in 1997 to \$811 in 1999**. More important, they have reduced the human suffering associated with workplace injuries.

"This incredible improvement by Brass Craft's Brownstown plant in only two years sends a strong message to all employers that an investment in employee safety will bring significant dividends," said CIS Director **Kathleen Wilbur**.

#### Ergonomic Success Award

In recognition of their ergonomic improvements, the Brownstown Plant received the **CET Ergonomic Success Award** on Sept. 18, the first issued to an employer since 1996. The facility shut down operations, so all employees could share in the recognition. MIOSHA Director **Doug Earle** presented the award to **Don Milroy**, President, Brass Craft Manufacturing Company/Masco Group Vice President; and **Eric Neer**, Director of Operations, Brownstown Plant.

"We consider our people our most important asset. Therefore their safety is our top priority," said **Milroy**. "Thanks to the teamwork of our fine people, we have improved our safety record and are the proud recipients of this prestigious award. My congratulations and thanks to all of our Brownstown people for this wonderful achievement."

"I'm proud to be a part of the team that has made our plant a safer place to work. We made safety our number one concern several years ago and initiated a full-court press throughout our entire operation to heighten the level of safety awareness," said **Neer**. "Having gone three years without a lost time accident is proof that our efforts have paid off. My hat is off to the Brownstown team!"

This award is issued by the **Consultation Education & Training (CET) Division** to employers for instituting ergonomic improvements and substantially reducing traumatic strain and sprain injuries and cumulative trauma disorder illnesses.

"It's an honor to present the Ergonomic Success Award to such an outstanding facility," said **Earle**. "We plan on sharing your excellent achievements with other companies, to help them understand that workplace safety and health makes good business sense."

The criteria for the award are stringent and include:

- An incidence rate below the rate for their SIC Code;
- Improvement achieved through engineering controls;

- At least a 25 percent reduction of traumatic strain/sprain injury, and/or cumulative trauma disorder illness rate, over 12 months;
- Employee input.

#### Ergonomic Innovations

The Brownstown plant's ergonomic improvements came from several areas, including: the ergonomic committee, near-miss/hazard reports, and safety committee suggestions. They reduced their recordable incidents from 22, 10 of which were ergonomics related, in 1997—to three injuries, with only one related to ergonomics, in 1999. In addition, they haven't had a lost time injury since Sept. 17, 1997. As of April 2000, Brass Craft has reduced its ergonomic-related injuries to zero.

They have initiated more than 14 specific ergonomics improvements to achieve these results. Some of the improvements include: Installing "sit/stand" chairs to relieve prolonged standing, installing foot rails to relieve back stress, installing turntables to reduce reaching strain, and many other improvements which eliminated lifting, pulling and straining procedures.

Brass Craft Manufacturing Company is a wholly owned subsidiary of Masco. They employ 1,400 workers, at six plants in the U.S. and Canada. They offer more than 7,000 products for the professional and the do-it-yourself plumber. The Brownstown plant has 175 workers on three shifts.



*Brass Craft Manufacturing shut down production so employees could share in the CET Ergonomic Success Award presentation.*

This column features successful Michigan companies that have established a comprehensive safety and health program which positively impacts their bottom line. An accident-free work environment is not achieved by good luck—but by good planning! Creating a safe and healthy workplace takes as much attention as any aspect of running a business. Some positive benefits include: less injuries and illnesses, lower workers' compensation costs, increased production, increased employee morale, and lower absenteeism.

# HEALTHCARE

# Work Conditions & Patient Safety

By: *Suellen Cook*  
CET Safety Consultant

Enhancing working conditions and patient safety in healthcare settings was the theme for a national conference Oct. 17-18, 2000, in Pittsburgh. The conference was sponsored by the Occupational Safety and Health Administration (OSHA), the National Institute for Occupational Safety and Health (NIOSH), the National Center for Infectious Diseases, the Agency for Healthcare Research and Quality (AHRQ), and the Veterans Health Administration.

The conference, "Enhancing Working Conditions and Patient Safety: Best Practices," focused on evidence-based approaches to improving both working conditions and patient safety in healthcare. Conference participants discussed successful and unsuccessful practices in these areas by reviewing both the barriers encountered and practical examples of improvements that can be replicated by others.

## Healthcare Concerns

Why a conference to discuss safety and health for healthcare workers and patient safety? The conference addressed concerns for workers making up eight percent of the total United States workforce. In the U.S., there are approximately 21,000 nursing home worksites with 1.6 million workers. By the year 2005, it is estimated that there will be 2.4 million nursing home direct care workers. The average non-fatal injury rate for nursing homes is 16.8 injuries per 100 workers. The trend is up per 100 full-time workers and continues to trend up when compared to high-hazard industries such as construction and farming.

The "Best Practices" conference also addressed patient safety. Patient safety or the lack thereof is not a new problem either. Approximately 20 percent of hospital admissions resulted in an injury after admission. Four percent of those admissions resulted in a serious or fatal injury. There are on average, 1.7 errors per day per patient. Thirty-six percent of teaching hospital admissions are injured. Deaths due to preventable adverse events in healthcare facilities are greater than all the deaths for multi-vehicle accidents, breast cancer and AIDS combined.

## Healthcare Workers

People do not come to work to hurt someone or to make a mistake. Healthcare worker safety and patient/resident safety is a complex issue. In the healthcare workplace, the contingent workforce is growing. Approximately 20 percent of healthcare workers are contract, part-time or temporary workers. This workforce is not stable, is less traditional, is younger, and is

also less educated. Additionally, these inexperienced workers are increasingly exposed to high risk-tasks with little or no safety training.

To complicate matters even more, there are more patients of a higher acuity level needing care, with fewer workers to do the job. Healthcare facilities continue to downsize the number of employees, de-skill the employees on-site, collapse job titles, and provide fewer direct care workers for the same number of patients and residents. As a result, healthcare workers are being injured. Moreover, mistakes are being made by caregivers and patient and resident safety in healthcare facilities is compromised.

## MIOSHA Presentation

In response to a call for abstracts, I submitted an abstract for consideration by the planning committee, and the abstract was accepted for presentation at the national conference. The presentation at this conference demonstrated MIOSHA's commitment to developing innovative safety and health education programs for Michigan's employers and employees. The following is a summary of the presentation.

The presentation, titled "Safety Strategies for Nursing Homes and Long-Term Care Facilities," shared the MIOSHA five-year strategic plan with the goal of reducing injuries and illnesses by at least 15 percent among caregivers in nursing homes and long-term care facilities.

MIOSHA has two primary strategic plan goals for the nursing home industry: 1) improve workplace safety and health for all workers, as evidenced by fewer hazards, reduced exposures, and fewer injuries, illnesses, and fatalities; and 2) increase employer and worker awareness of, commitment to, and involvement with, safety and health to effect positive changes in workplace culture. To meet these strategic plan goals, MIOSHA will be increasing the number of inspections by enforcement personnel and also the number of voluntary hazard surveys and training programs for facilities with the Standard Industrial Classification (SIC) codes of 8050-8059.

For a safety and health program to be successful, there must be management commitment and active employee participation. For years there has been the assumed risk that hazardous chemical exposures, needlesticks, cumulative trauma disorders such as back strains and sprains, to name a few examples, are all a normal and acceptable part of the healthcare worker's job. Workers' rights include an environment free from recognized hazards that could cause serious injury or death. Workers have a right to be trained in Bloodborne Infectious Diseases, Hazard Communication/Right to Know, and Safe Resident/

Patient handling techniques. Workers also have the right to contact MIOSHA, participate in the inspection process and not be discriminated against.

## CET Healthcare Services

Consultation Education & Training (CET) consultants are available to conduct on-site services to nursing homes and long-term care facilities. Employers can request the initiation of a **Safety and Health Development Program** to:

- Evaluate their overall safety and health programs;
- Review and audit the OSHA injury and illness log (Log 200);
- Conduct a hazard survey/inspection of the worksite (no penalties or citations);
- Develop customized in-service training for supervisors at the worksite; and
- Provide follow-up audits and support to management and staff to monitor progress.

Employers can also request the initiation of an **Ergonomics Development Program (EDP)** by CET consultants. The EDP will:

- Identify workplaces with potential ergonomics problems;
- Supply the employer with a comprehensive proposal covering total case incident rate, sprain/strain case rate, and cumulative trauma disorder (CTD) case rate;
- Recommend available ergonomics program and training resources;
- Furnish customized ergonomics training to supervisors; and
- Provide follow-up audits and support to management and staff to monitor progress.

If you are interested in preventing injuries and illnesses in your workplace, and providing safety and health education to your employees, the MIOSHA program is ready to help you achieve your goals. For more information please call: **CET Division, 517.322.1809.**

## CET Seminars

MIOSHA has a series of seminars, "Safety Solutions for Nursing Homes and Long-Term Care Facilities," which address occupational hazards in nursing homes and personal care facilities. The remaining seminars are below.

Date	Location
3/13	Mt. Pleasant
3/22	Temperance
5/16	Escanaba
5/23	Westland
8/15	Lansing

For details on the March seminars, see page 13. Details on the other seminars will be in future issues.



# Management Strategies

## HEALTHCARE

*By: Gerald Medler  
CET Safety Consultant*

The adoption of the MIOSHA Strategic Plan has created a renewed interest and focus upon occupational safety and health issues in nursing homes and long-term care facilities.

Back in the '70s, safety consultants received workers compensation data listing all

(Eg. bed to wheelchair, wheelchair to shower chair, bed to Gurney, moving patient to change bed clothes or linens, or transporting a patient.) Slips, trips and falls caused by contact with fluids on walking surfaces, would contribute another five to 10 percent. The remaining cases usually involved strains and sprains related to material handling activities in dietary, housekeeping, laundry and maintenance departments.

have excellent safety records.

### Scheduling

A second part of the solution came while working with Helen Millen, associated with the Wayne State University School of Nursing. We were honored to have her participate in many of our health care seminars.

One of her favorite comments was, "Where is it carved in stone that all baths have to be given between 8:00 a.m. and 11:00 a.m.?" Some patients may prefer their bath in the afternoon or evening. Overloading the day shift with all the transferring activities contributes to the problem! Scheduling the work load over all three shifts will assist in making more staff available for two-person transfers when required, as well as distributing the demand for mechanical lifting aids, hence increasing availability.

### Staffing

The third element of our solution to this problem is closely related to the scheduling issue. That is: Staffing. In instances where scheduling of transferring activities cannot alone reduce the risk of injury, additional staff should be scheduled at peak transferring periods. These staffing levels have to be commensurate with the work loads that are being placed upon the employees.

This may not be the total solution to the problem, but it has helped in several of the nursing homes and medical care facilities I have had the opportunity to work with over the years! ■



*This healthcare worker is using a lifting device to transfer the patient. (Photos courtesy of Michigan Health & Hospital Association.)*

places of employment that had three or more compensable injuries for the counties they covered. This data contained: the part of the body, nature of injury, source of injury, and type of accident, as well as a compensable injury rate. Even at that time, most nursing homes and personal care facilities had rates higher than the majority of manufacturing plants in my area (Northern Michigan Lower Peninsula).

### Safety Audit

As a part of our consultation program, we contacted these facilities to offer assistance with their safety program. Part of our service involved conducting a needs analysis (group meetings with supervisors to get their input as to why and how employees were getting injured), a cost analysis of uninsured costs, and a hazard survey. We also conducted an injury audit of recordable cases and lost-time accidents, to identify the causes of the accidents and any trends emerging.

The average audit revealed that approximately 80 percent of the cases involved strain/sprain injuries, primarily to the back, during patient handling and transferring activities.

I soon came to realize this problem could not be solved solely by compliance with MIOSHA safety standards. In fact, standards had very little to do with the problem! It also became readily apparent the problem was not an issue of lack of knowledge or skill. These facilities had in-service training directors and departments, physical therapists, and held more employee in-service training sessions in one month, than most manufacturing plants did in a year! They were

the experts in these matters. But if this was the case, why did they continue to have these injuries?

### Accountability

Part of the answer came one day when I was working with an in-service director, named Katie, at a nursing home in Traverse City. She was one of the most dedicated and caring people that I have ever met. While discussing patient handling concerns, the topic of transfer belts (gate belts) came up, and she explained their extensive employee training program. Then there was a moment of silence, she sort of lowered her head, and remarked "but they don't use them!" All the knowledge and skill is worthless if it's not used.

I then met with the home's administrator, to discuss supervisor accountability and responsibility for safety and to insure that all this training was not wasted. In this case, transfer belts were made a part of the uniform and employees who forgot them, had to punch out to go home and get them. Accountability at all levels is the one common element that I have found in organizations that



*Patient transfers can often be the source of back injuries.*

# CET AWARDS

The MIOSHA Consultation Education & Training (CET) Division recognizes the safety and health achievements of Michigan employers and employees through CET Awards.

The CET Plaque is granted to employers who have achieved five or more years of outstanding record. The CET Gold Award is given to employers who have achieved two years of outstanding record. The CET Silver Award is issued to employers with one year of an outstanding record, and the CET Bronze Award recognizes employers who have made a measurable improvement.

CET also gives out two ergonomic awards. The CET Ergonomic Innovation Award is presented to companies for innovative ideas which have been implemented to reduce worker strain. The CET Ergonomic Success Award is awarded to employers who have instituted ergonomic improvements and have reduced traumatic injuries substantially.

## Lacks Enterprises

Lacks Enterprises of Grand Rapids received two **Ergonomic Innovation Awards** (CIS) on Sept 21. Lacks Enterprises has 13 manufacturing plants in the Grand Rapids area. They have initiated significant ergonomic changes in their plants to reduce workplace injuries. Two plants received awards for ergonomic innovations: the **Barden Assembly Plant** and the **52<sup>nd</sup> Street Paint East Plant**.

"Ergonomic injuries and illnesses are a major concern to employers today," said CIS Director **Kathy Wilbur**. "We are proud to recognize

Lacks Enterprises for their outstanding efforts to make ergonomic changes to protect employees, and at the same time increase productivity. This just makes good business sense."

BSR Director **Doug Earle** presented the award to Lacks Enterprises President **Richard Lacks, Jr.** Employee and management representatives, as well as plant safety committee members attended the presentation. Other state and local officials were on hand to congratulate Lacks Enterprises.

"Our President, Richard Lacks, Jr., has given us the direction and support required to make health and safety the top priority at Lacks Enterprises," said **Roger Andrzejewski**, Director of Human Resources. "His leadership promotes a working environment that generates the necessary cooperation between safety, medical, maintenance and manufacturing personnel, which results in the ergonomic innovations that we have implemented. We take great pride in our accomplishments, and the recognition we are receiving from the State of Michigan."

The Barden Assembly Plant rearranged work stations with specific equipment to keep worker's wrists in a neutral position, thereby preventing repetitive motion injuries. Workers at the 52<sup>nd</sup> Street Paint East Plant place 4' by 5' grilles into long boxes, which caused back stress. Corrugated boxes were replaced with foams cells which automatically banded together and allowed employees to work at their comfort level.

"Lacks Enterprises has positioned its company as a leader in ergonomic awareness and safety," said BSR Director Doug Earle. "We applaud their efforts to work safely and work smartly."

For four decades, Lacks Enterprises has been a leader in the production of exterior decorative trim components for the automotive industry. Their progressive use of integrated production, coupled with sophisticated engineering technology, enables them to produce individual parts of the highest quality. Lacks Enterprises has 14 manufacturing facilities, 13 in the Grand Rapids area, and employ 1,850 workers in the Grand Rapids area.



MIOSHA Director Doug Earle (third from R.) presents two Ergonomic Innovation Awards to Lacks representatives: (from L.) Mark Stratton, Corporate Safety Manager; A.J. Ponstein, Director of Protective Services; Kurt Lacks, Executive Vice President; Roger Andrzejewski, Director of Human Resources; Lee Pool, M.D., Corporate Medical Director; Richard Lacks, Jr., President & CEO.

## Dowding Industries, Inc.

Dowding Industries, Inc. received the **CET Bronze Award** from CET Consultant **Debra Gundry**. Dowding Industries incorporates safety in everything they do. Dowding conducts monthly safety meetings with employees, and works closely with MIOSHA and their workers' compensation carrier to assist with employee training. Safety plays a very important part in all of the company's business and manufacturing operations. According to Gundry, Dowding has an active safety committee, written safety policies, and a strong commitment of resources to safety.

Dowding Industries, Inc., has three Michigan locations, two 80,000 square-foot buildings in Eaton Rapids, and a 20,000 square-foot building in Springport. Dowding Industries employs approximately 200 workers at the combined facilities. They manufacture parts for the diesel engine business, along with some light automotive work. Dowding has the ability to build dies, do short run and proto-type work, and has complete manufacturing and stamping capabilities.



CET Consultant Debra Gundry (center) presents the Bronze Award to Jerry Heisler, Don Fowler, Ray Prater and Mary Schneider.

# Michigan FACE

## A New Initiative to Prevent Work-Related Fatalities

By: Mary Jo Reilly, MS, Epidemiologist  
MSU Department of Medicine

Every work-related death in Michigan is preventable. That is the premise that underlies a new surveillance and prevention initiative in Michigan called **MI FACE**, which stands for **Michigan Fatality Assessment and Control Evaluation**. This effort is being established and run through the Michigan State University College of Human Medicine's Occupational and Environmental Medicine program. **Dr. Kenneth Rosenman** and his team of two industrial hygienists, an epidemiologist, specialists in the fields of farm safety, communications and engineering, and research support staff are working to actively study the causes of all work-related deaths in our state.

The project's mission is to use the information learned about the circumstances that lead to work-related deaths to develop recommendations that can be applied to prevent similar deaths from occurring. The recommendations will be distributed to stakeholders who are in a position to help prevent similar deaths. Key stakeholders include: unions; employers; health and safety representatives; similar industries; Michigan State University Agricultural Extension agents; vendors and manufacturers of machines involved in fatalities; and local, state and national health and safety professionals.

Work-related deaths cover a wide range of circumstances, some of which might not typically be considered or identified as occupational. Some of the more commonly thought of circumstances include construction-related accidents like falls or electrocutions and manufacturing-related fatal injuries. Examples of circumstances perhaps not as commonly thought of include: farming injury-related deaths including family members who work on the farm; employees who travel for their work, such as salespeople; and self-employed individuals doing construction-related work.

This new initiative to study work-related traumatic deaths in our state will begin active tracking and follow-up in January 2001. Currently, the MSU team is establishing a network of key individuals who will report the fatal accident incidents to MSU as they occur. Key individuals with information on fatal events include: medical examiners; MIOSHA; police and sheriff offices; newspapers; county clerks; the MSU Agricultural Extension agents; and others.

It is critical that MSU be notified of the fatal event as soon as possible after it occurs. To facilitate rapid reporting of work-related fatalities, MSU is providing a toll-free telephone number, **800.446.7805**, and an email address, **MIFACE@ht.msu.edu**, that individuals may use to report a fatal work-related accident. Rapid reporting of the work-related fatality to MI FACE will allow the MI FACE investigators an opportunity to conduct a timely and factual evaluation of the workplace where the fatality occurred. MI FACE will direct a considerable amount of effort to investigate workplace fatalities in a non-enforcement capacity.

The MSU team is encouraged by the interest and partnerships being developed with state groups and individuals to work to prevent these tragic fatalities. By developing meaningful, effective and practical educational materials from the results of the fatality investigations, such as Fatal Alert Bulletins, the MSU team hopes to help make a difference in people's lives.

This grant is one of four grants awarded by Ford Motor Company as part of their Settlement Agreement following the Ford Rouge Power Plant explosion on Feb. 1, 1999. If you would like to know more about the MI FACE initiative, please call the toll-free number listed above, or visit the MSU College of Human Medicine's Occupational and Environmental Medicine program Website at: [www.chm.msu.edu/oem/index.htm](http://www.chm.msu.edu/oem/index.htm). ■

# Recordkeeping

Recordkeeping is an important part of a company's total safety and health plan. Conscientious and detailed records are a valuable tool for the employer or employees to help recognize patterns of accidents or illnesses that might exist in various parts of the plant. This information allows employers to take preventative actions and to make necessary hazard abatement.

The MIOSHA Act requires most Michigan private-sector employers with 11 or more employees to log and maintain records of work-related injuries and illnesses, and to make those records available during MIOSHA inspections of the workplace. Accurate accident and injury records are necessary to help MIOSHA determine how good a job an employer is doing at providing a safe and healthful workplace.

These records include the **MIOSHA Log 200** - Log and Summary of Occupational Injuries and Illnesses, and the **MIOSHA Form 101** - Supplementary Record of Occupational Injuries and Illnesses.

During the month of February, a summary of the total number of job-related injuries and illnesses which occurred in the previous year must be posted. (In the year 2001, the log from 2000 must be posted.) Employers are required to post the annual totals of the information contained on the right-hand portion of the MIOSHA Log 200. The summary must remain posted from February 1 to March 1. The log is to be displayed wherever notices to employees are usually posted.

Companies with no injuries and illnesses during the previous year must post the log with zeros on the total line. The person who prepares the annual summary must certify that the totals are correct and sign the form. Employers must make a copy of the summary available to employees who move from worksite to worksite, and employees who do not report to any fixed establishment on a regular basis.

Employers with 10 or fewer employees and employers in certain industry groups (retail trade; finance, insurance and real estate; and certain services industries) are normally exempt from the MIOSHA recordkeeping and posting requirements. These exemptions do not excuse any employer from coverage by MIOSHA or from compliance with all applicable safety and health standards.

If you encounter recording problems or for more information, please contact the **MIOSHA Information Division** at: **517.322.1848**.

An employer is required by law to notify MIOSHA within eight hours of a fatality or any hospitalization of three or more employees suffering injury or illness from an accident. A special "**Fatality Hotline**" is available 24 hours: **800.858.0397**.

## Reminder

Employers must post the MIOSHA Log 200 during the month of February

The image shows a sample of the MIOSHA Log 200 form. The header section includes fields for 'Log and Summary of Occupational Injuries and Illnesses', 'Michigan Department of Consumer & Industry Services', 'For Calendar Year 19', and 'Page 1 of 2'. Below the header is a table with columns for 'Date', 'Time', 'Location', 'Description of Injury or Illness', and 'Posting of Log Summary for the Calendar Year 1999'. The table is designed to record individual incidents and then summarize the totals for the previous year.



# Canada's Largest Health & Safety Event

By: Richard Zdeb,  
CET Safety Consultant

Each spring, the **Industrial Accident Prevention Association (IAPA)** sponsors Canada's largest health and safety conference and trade show. The conference, "**People Creating Solutions: Health & Safety 2000**," was held April 10 - 12, 2000, in Toronto, Ontario. Each year the conference attracts more than 6,000 health and safety professionals from across Canada, the U.S., and internationally. The conference offers: interactive hands-on demonstrations; comprehensive sessions, seminars, and workshops; keynote speakers; and more than 350 exhibitors.

The IAPA is a non-profit health and safety organization whose vision is: "A world where risks are controlled because everyone believes suffering and loss are socially, morally and economically unacceptable." IAPA has been hosting its annual conference and trade show for 84 years to bring health and safety professionals together to help businesses and communities achieve safe and healthy workplaces. They have more than 45,000 member firms representing 1.4 million employees across Ontario.

I was invited to participate in the conference by **Veronica Campbell**, Safety and Health Director at the Windsor-Detroit Tunnel Corporation. Campbell is a member of the Council of Representatives, which brings local ideas and concerns to the IAPA Board of Directors. She had attended a number of Consultation Education & Training (CET) seminars I had given, and as a result, asked me to conduct a session on, "**The Role of a Supervisor in Health and Safety**."



CET Safety Consultant Richard Zdeb presents a session at Canada's IAPA Health & Safety Conference 2000.

My program offered attendees a "Doing Business in Michigan" perspective, and was a 90-minute overview of the eight-hour CET course. I was enthused to have 160 people attend my session. Over the years, this eight-hour seminar for supervisors was developed to address small employer needs that could not be handled at the employer's facility.

The program consists of five key areas of formal responsibilities for supervision in health and safety. These include:

- Safety and Health Inspections,
- Job Safety Analysis,
- Accident Investigation,
- Hazard Recognition and Corrective Action, and
- Worker Training.

From my point of view, this conference offered me a real opportunity for sharing information. There are a number of companies in Michigan that do business in Canada or have their home offices there. To better serve our Michigan companies with interests in Canada, I researched the following topics at the conference:

- The Canadian perspective on the Right to Refuse for Canadian workers;
- The Due Diligence provisions that are in the Canadian OSH Act;
- The handling of Canadian Federal and Provincial differences in their Act;
- The role of the IAPA compared to that of the CET Division of MIOSHA;
- The possibility of a future Canadian Ergonomics Standard;
- Certification requirements for worker representation in manufacturing and other selected industries; and
- Canadian OSH requirements of safety and health committees.

I was pleased to have the opportunity to share information about our Michigan CET programs and services. And I was especially pleased to greatly increase my knowledge of Canada's occupational health and safety programs.

For further information on IAPA, you can visit their Website at: [www.iapa.on.ca](http://www.iapa.on.ca). For information on CET programs and seminars, please call **517.322.1809**, or visit the bureau's Website at: [www.cis.state.mi.us/bsr](http://www.cis.state.mi.us/bsr). ■

## Winter Warning

Winter has arrived with a vengeance in Michigan this year, and is forcing America's outdoor workers to face yet another challenge to safety and health on the job. Exposure to cold weather can be more than uncomfortable, it can be dangerous. To help protect them, MIOSHA is reminding employers and employees to avoid prolonged exposure to frigid temperatures.

Employers and workers need to know how to defend against the hazards of working in extremely cold temperatures. During winter months, workers in such industries as construction, commercial fishing and agriculture need to be especially mindful of the weather, its effects on the body, proper prevention techniques, and treatment of cold-related disorders.

Wearing the right clothing is the most important step a person can take to fight the cold's harmful effects, and ultimately avoid cold-related injuries. Employers can take added steps to help protect their workers by having employees come out of the cold for periods of time, providing additional heat sources, and setting up systems to check more frequently on people in the cold.

During cold weather about 60 percent of a person's body fuel is used to heat the body. When exposed to frigid temperatures, particularly for extended periods of time, a person will tire easily, and exposed skin will cool rapidly. This is prime breeding ground for the dangerous effects of the cold: hypothermia and frostbite. Combine cold temperatures with water, including actual immersion, and trench foot becomes another potential serious ailment.

Federal OSHA has produced a fact sheet entitled, "**Protecting Workers in Cold Environments**," which defines the harmful effects of the cold and provides guidelines and recommendations for protecting workers. Also included is immediate first aid measures to be taken to treat cold-related injuries or illnesses. The fact sheet is available on the OSHA Website at: [www.osha.gov](http://www.osha.gov), and then clicking on the "News Room" and "Fact Sheet" links.

The quiet symptoms of potentially deadly cold-related ailments often go undetected until the victim's health is endangered. Knowing the facts on cold exposure and following a few simple guidelines can ensure that this season is a safe and healthy one.

# Education & Training Calendar

Date	Course Location	MIOSHA Trainer Contact	Phone
<b>January</b>			
29	Accident Inv., Recordkeeping, Work Comp Strategies Southfield	Karen Odell Pat Murphy	248.353.4500
<b>February</b>			
1	When MIOSHA Visits Shelby Township	Lee Jay Kueppers Gene Shepherd	810.731.3476
5	Supervisors' Role In Safety Southfield	Richard Zdeb Pat Murphy	248.353.4500
7	Managing the Results of Medical Surveillance Lansing	Jenelle Thelen Sandy Long	517.394.4614
7 & 8	2-Day Mechanical Power Press Clarkston	Richard Zdeb Peggy Desrosier	248.620.2534
13	Machine Guarding Kalamazoo	Micshall Patrick Lisa Peet	616.373.7807
15	Powered Industrial Truck "Train-the-Trainer" Grand Rapids	Micshall Patrick Danielle Wheeler	800.704.7676
21	Industrial Ergonomics Clarkston	Richard Zdeb Peggy Desrosier	248.620.2534
21, 22, 23	Safety & Health Administrator Course Centerville	Quenten Yoder Tammy Reed	616.467.9945
22	Introduction to Industrial Hygiene Kalamazoo	Jenelle Thelen Danielle Wheeler	800.704.7676
26	Strategies to Eliminate Amputations Southfield	Linda Long Ed Ratzenberger	248.557.7010
27	Powered Industrial Truck "Train-the-Trainer" Gaylord	Doug Kimmel Shelly Hyatt	231.546.7264
<b>March</b>			
5	Ergonomics Mt. Pleasant	Bob Carrier Bill Knapp	517.772.4000
6, 7, 8	Safety & Health Administrator Course Saginaw	David Luptowski Bill Lechel	517.755.5751
8, 15, 22	Safety & Health Administrator Course Canton	Suellen Cook Jacqueline Schank	734.464.9964
13	Safety Solutions for Nursing Homes & Long Term Care Mt. Pleasant	Bob Carrier Bill Knapp	517.772.4000
20 & 27	10-Hour Construction Seminar Southfield	Jerry Faber Keijania Mann	248.948.7000
22	Safety Solutions for Nursing Homes & Long Term Care Temperance	Jennifer Clark-Denson Judith Hamburg	734.847.0559
26, 27, 28	Safety & Health Administrator Course for Construction Bloomfield Hills	Tom Swindlehurst Robin McLellan	248.972.1141
<b>April</b>			
3	Introduction to Industrial Hygiene Escanaba	Jenelle Thelen Doreen Berndt	906.786.5802
9	When MIOSHA Visits Southfield	Suellen Cook Pat Murphy	248.353.4500

## Construction Safety Standards Commission

### Labor

Mr. Daniel Corbat

Mr. Carl Davis\*\*

Mr. Andrew Lang

Mr. Martin Ross

### Management

Mr. Thomas Hansen

Mr. Charles Gatecliff

Ms. Cheryl Hughes

Mr. Peter Strazdas\*

### Public Member

Mr. Kris Mattila

## General Industry Safety Standards Commission

### Labor

Mr. James Baker

Mr. Tycho Fredericks

Mr. Michael D. Koehs\*

Mr. John Pettinga

### Management

Mr. George A. Reamer

Mr. Timothy J. Koury\*\*

Ms. Doris Morgan

### Public Member

Ms. Geri Johnson

## Occupational Health Standards Commission

### Labor

Dr. G. Robert DeYoung\*\*

Ms. Cynthia Holland

Capt. Michael McCabe

Ms. Margaret Vissman

### Management

Mr. Robert DeBruyn

Mr. Michael Lucas

Mr. Richard Olson

Mr. Douglas Williams\*

### Public Member

Dr. Glen Chambers

\*Chair \*\*Vice Chair

# Standards Update

## Work Continuing on MIOSHA Construction Safety Part 22 Standard - Signals, Signs, Tags and Barricades

By: Mike Eckert, Chair

Part 22 Advisory Committee

A standard of significant importance to organizations involved in highway construction and maintenance in Michigan is in the process of being enhanced and updated to better address the specific safety issues related to these operations.

The proposed Part 22 Standard - *Signals, Signs, Tags and Barricades* addresses, in part, traffic control in work zones as well as several other issues pertinent to those involved in highway work operations. It also addresses signing issues in general construction operations. The standard adopts Part 6 of the Michigan Department of Transportation's *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)* and enforces these provisions on worksites.

The proposed revised standard will strive to breed more consistency between MDOT and MIOSHA directives for traffic control. It will also update definitions and clarify information for traffic regulators (formerly known as "flaggers").

Perhaps most importantly, the standard will add language specific to the highway construction and maintenance industry regarding the placement and removal of traffic control devices, such as cones, drums, signs, barricades, etc. The proposed standard will allow for workers placing these devices from moving vehicles to use alternative placement methods which will help to prevent injuries from falling and/or being struck by construction equipment.

The revisions to the standard are currently at the Legislative Service Bureau for informal review. The proposal has begun the long administrative process to be promulgated into law.

### Part 22 Advisory Committee Members

#### Management

Forrest Henry - AGC

Roger Swap - HS.CO.

Bruce Monroe - MDOT

Mike Eckert - MRBA

#### Labor

Ken Peterie - IUOE #324

Andre Schirk - IUEC #85

James DeVos - IUOE #324

Paul Gassel - MLT&A

## Advisory Committee Members Needed

By: Connie Munschy, Chief,

Standards Division

One of the unique aspects of the MIOSHA program is the use of commissions to develop and adopt standards. The citizen members of our three commissions are appointed by the Governor. The commissions decide what standards need to be adopted, what standards need to be changed, and what standards need to be rescinded.

Each commission, when it decides to adopt a standard specific to Michigan, appoints an advisory committee from the effected industry, representing both management and workers, to draft the standard. All commission and advisory committee meetings are open to the public.

Applications are reviewed by the appropriate commission to ensure that the candidate has the necessary expertise and experience, and also that the committee maintains a balance of labor and management representatives. The dedication of the many advisory committee members has helped to ensure that MIOSHA standards are written clearly and concisely in plain English, to reflect the needs of Michigan employers and employees.

Currently, we have vacancies on six advisory committees. Please contact the Standards Division if you would like to apply for one of the following vacancies.

#### Construction Standards

Part 12 Scaffolds - Labor

Part 13 Mobile Equipment - Management

Part 20 Demolition - Labor & Management

Part 26 Steel Erection - Labor

#### General Industry Standards

Part 58 Vehicle Mounted Elevated Work Platforms - Labor & Management

Part 63 Pulp, Paper, and Paperboard Mills - Labor & Management

To contact Connie Munschy, Chief of the Standards Division, or any of the Commissioners, please call the Standards Division Office at 517.322.1845.



# Status of Michigan Standards Promulgation

## Occupational Safety Standards

### General Industry

Part 06.	Fire Exits .....	Final, effective 5/5/00
Part 18.	Overhead and Gantry Cranes .....	At Advisory Committee
Part 19.	Crawler, Locomotives, Truck Cranes .....	Approved by Commission for review
Part 20.	Underhung and Monorail Cranes .....	Approved by Commission for review
Part 56.	Storage and Handling of Liquefied Petroleum Gases .....	Final, effective 8/7/00
Part 58.	Vehicle Mounted Elevating & Rotating Platforms .....	Approved by Commission for review
Part 69.	Compressed Gases .....	Final, effective 8/7/00
Part 74.	Fire Fighting/Amendment #2 .....	At Advisory Committee
Part 78.	Storage & Handling of Anhydrous Ammonia .....	Final, effective 7/6/00
Part 93.	Air-Receivers .....	Final, effective 8/7/00
Part 00.	Ergonomics .....	Before Commission 12/19/00

### Construction

Part 07.	Welding & Cutting .....	Approved by Commission for review
Part 10.	Lifting & Digging .....	Draft at LSB for formal review
Part 14.	Tunnels, Shafts, Cofferdams & Caissons .....	RFR Approved by ORR
Part 18.	Fire Protection & Prevention .....	At Advisory Committee
Part 20.	Demolition .....	Certified by ORR
Part 22.	Signs, Signals, Tags & Barricades .....	Draft at LSB for formal review
Part 26.	Steel and Precast Erection .....	At Advisory Committee
Part 30.	Telecommunications .....	Approved by Commission for review
Ad Hoc	Communication Tower Erection .....	To be convened

## Occupational Health Standards

### General Industry

Abrasive Blasting .....	Draft at LSB for informal review
Air Contaminants .....	Draft at LSB for informal review
Asbestos for General Industry .....	Final, effective 8/15/00
Lead .....	Final, effective 10/12/00
Methylenedianiline .....	Final, effective 8/7/00
Personal Protective Equipment .....	Final, effective 9/28/00
Powered Industrial Trucks R3225 .....	Rescinded
Respirators in Dangerous Atmospheres .....	Rescinded
Ergonomics .....	Before Commission 12/19/00

### Construction

Noise in Construction R6260 .....	Final, effective 10/6/00
Personal Protective Equipment for Construction R6260 .....	Final, effective 8/15/00

## Administrative Rules

Part 11.	Recording of Occupational Illnesses and Injuries .....	Final, effective 6/22/00
Part 12.	Variances .....	Final, effective 6/22/00

*The MIOSHA Standards Division assists in the promulgation of Michigan occupational safety and health standards. To receive a copy of the MIOSHA Standards Index (updated May 2000) or for single copies and sets of safety and health standards, please contact the Standards Division at 517.322.1845.*

RFR Request for Rulemaking  
 ORR Office of Regulatory Reform  
 LSB Legislative Services Bureau  
 JCAR Joint Committee on Administrative Rules

# Variances

Published January 26, 2001

Following are requests for variances and variances granted from occupational safety standards in accordance with rules of the Department of Consumer & Industry Services, Part 12, Variances (R408.22201 to 408.22251).

## Variances Requested Construction

**Part and rule number from which variance is requested**

Part 8 - Material Handling: Rule R408.40833, Rule 833(1)

**Summary of employer's request for variance**

To allow employer to tandem lift structural steel members under controlled conditions and with stipulations.

**Name and address of employer**

Abray Steel Erectors, Inc.

**Location for which variance is requested**

Walmart Store, Roseville

L'Anse Creuse Public School, Harrison Twp.

**Name and address of employer**

American Erectors, Inc.

**Location for which variance is requested**

Koll Corporate Center, Auburn Hills

**Name and address of employer**

Douglas Steel Erection Company

**Location for which variance is requested**

General Motors Platinum Plant, Delta Township

**Name and address of employer**

Johnson Steel Fabrication, Inc.

**Location for which variance is requested**

Timber Wolf Lake Dining Hall & Activity Hub, Lake City

**Name and address of employer**

MBM Fabricators & Erectors

**Location for which variance is requested**

Danou R & D Facility, Allen Park

**Name and address of employer**

McGuire Steel Erection, Inc.

**Location for which variance is requested**

Walled Lake High School, Commerce Twp.

Ford Rouge Glass Plant, Dearborn

Delphi Bldgs. C & D, Troy

New Plymouth High School, Canton

Oakland Commons Bldg. "E", Southfield

E. D. S. Office Building, Auburn Hills

Tri-City Christian Center, Canton

GM Bldg. 104 - Milford Proving Grounds, Milford

Romulus Elementary School, Romulus

VanBuren Commerce Center, VanBuren Twp.

Beaumont Hospital, Troy

Blue Water Bridge/Inspection Facility Expansion, Port

A. T. Callas Bldg. A & B, Troy

**Name and address of employer**

Pioneer Inc.

**Location for which variance is requested**

Mary Free Bed Hospital, Grand Rapids

**Name and address of employer**

SCI/Steelcon

**Location for which variance is requested**

Ford Field Domed Stadium Project, Detroit

**Name and address of employer**

Sova Steel, Inc.

**Location for which variance is requested**

Ford Field Domed Stadium Project, Detroit

Palladium Theater, Birmingham

LLC #6 Warehouse, Livonia

Walled Lake Middle School, Walled Lake

**Name and address of employer**

Whaley Steel Corp.

**Location for which variance is requested**

Mac Steel, Jackson

Covenant Health Care, Saginaw

**Name and address of employer**

Whitmore Steel

**Location for which variance is requested**

Ford UAW Child Care, Dearborn

Spring Arbor College, Spring Arbor

GM Milford Proving Grounds, Milford

University of Michigan, Ann Arbor

**Part and rule number from which variance is requested**

Part 10 - Lifting and Digging Equipment: Rule R408.41015a(2) (d)(g) (3) (4)

**Summary of employer's request for variance**

To allow the use of a work platform suspended on the loadline of a crane to be used without part of the guardrail system. The platform is used to remove concrete form work from outside the fascia beams on bridge deck pours. All requirements of Construction Safety Standard, Part 10. Lifting and Digging Equipment except Rule 1015a(2)(d) and 1018a(1) are met according to certain stipulations.

**Name and address of employer**

Walter Toebe Construction Company

**Location for which variance is requested**

State Street Bridge/Dam Rehabilitation Project #1020.007-R-1, Alma

**Part and rule number from which variance is requested**

Part 12 - Scaffolds and Scaffold Platforms: R408.41221, Rule 1221 (1)(c)

**Summary of employer's request for variance**

To allow employer to use stilts at a maximum height of 24 inches under controlled conditions and according to certain stipulations.

**Name and address of employer**

William Reichenbach Co.

**Location for which variance is requested**

General Office Building - Secondary Complex, Lansing

**Part and rule number from which variance is requested**

Part 13 - Mobile Equipment: Ref. #1926.1000 (a) (1&2) (b)

**Summary of employer's request for variance**

To allow the employer to work under overhead conveyor obstructions in an assembly plant to dig shallow foundation pad excavations without the use of rollover equipment providing certain stipulations are adhered to.

**Name and address of employer**

Aristeo Construction

**Location for which variance is requested**

Ford Michigan Truck Plant, Wayne

**Part and rule number from which variance is requested**

Part 32 - Aerial Work Platforms: Rule R408.43209, Rule 3209 (b) and R408.43209, Rule 3209 (9)

**Summary of employer's request for variance**

To allow the employer to remove the guardrail system of a Manually Propelled Elevated Work Platform and to use a ladder on the platform to gain additional height under controlled conditions and according to certain stipulations.

**Name and address of employer**

Walter Toebe Construction Co.

**Location for which variance is requested**

I-94/I-75 Interchange Project, Detroit

**Part and rule number from which variance is requested**

Part 32-Aerial Lift Platforms: Rule R408.43209, Rule 3209(8)

**Summary of employer's request for variance**

To allow employer to firmly secure a scaffold planks to the top of the intermediate rail of the guardrail system for use as a work platform provided certain stipulations are adhered to.

**Name and address of employer**

S. A. Comunale

**Location for which variance is requested**

Midfield Terminal Project, Romulus

**Part and rule number from which variance is requested**

Part 32 - Aerial Lift Platforms: Rule R409.43209, Rule 3209 (8)(c)

**Summary of employer's request for variance**

To allow employer to firmly secure a scaffold plank to the top of the intermediate rail of the guardrail system of an aerial lift for limited use as a work platform provided certain stipulations are adhered to.

**Name and address of employer**

Midwest Steel, Inc.

**Location for which variance is requested**

Ford Motor Co., Romeo

**Part and rule number from which variance is requested**

Part 32 - Aerial Lift Platforms: Rule R408.43209, Rule 4209 (8)(b) and R408.43209 Rule 3209 (9)

**Summary of employer's request for variance**

To allow employer to firmly secure a scaffold plank to the top of the intermediate rail of the guardrail system of an aerial lift for limited use as a work platform provided certain stipulations are adhered to.

**Name and address of employer**

John E. Green Company

**Location for which variance is requested**

General Motors Grand River Assembly Project, Lansing

**Name and address of employer**

The State Group International

**Location for which variance is requested**

Northwest Midfield Terminal Project, Detroit

## Variances Granted Construction

**Part and rule number from which variance is requested**

Part 8-Material Handling: Rule R408.40833, Rule 833(1)

**Summary of employer's request for variance**

To allow employer to tandem lift structural steel members under controlled conditions and with stipulations.

**Name and address of employer**

American Erectors, Inc.

**Location for which variance is requested**

Victor Corporate Park, Livonia

**Name and address of employer**

Bristol Steel & Conveyor Corp.

**Location for which variance is requested**

Michigan Automotive Compressor, Inc., Parma

**Name and address of employer**

Broad, Vogt and Conant, Inc.

**Location for which variance is requested**

Ford Field Project, Detroit Lions, White/Olsen, Detroit

**Name and address of employer**

Douglas Steel Erection Company

**Location for which variance is requested**

Bed, Bath and Beyond, Okemos

300 N. Washington, Lansing

General Motors ASRS Bldg/Foam & Deadener, Lansing

Park-Davis Building B-26, Ann Arbor

**Name and address of employer**

McGuire Steel Erection, Inc.

**Location for which variance is requested**

Thermofil Office Addition, Fowlerville  
 Detroit Edison-St. Clair Power Plant, East China  
 Fountain Walk Mall, Novi  
 Detroit Axle Fitness Center/Daimler Chrysler, Detroit  
 Crittenton Hospital Outpatient, Rochester Hills  
 St. Clair Community College, Port Huron  
 Detroit Diesel-Mezzanine, Redford  
 ACCO Systems, Warren  
 Decatur Public Schools, Decatur  
**Name and address of employer**  
 Midwest Steel, Inc.

**Location for which variance is requested**

Ford Motor Co., Romeo  
**Name and address of employer**  
 National Riggers & Erectors, Inc.

**Location for which variance is requested**

Ford Heritage Project, Dearborn  
**Name and address of employer**  
 SCI/Steelcon

**Location for which variance is requested**

General Motors Platinum Project, Lansing  
**Name and address of employer**  
 Sova Steel, Inc.

**Location for which variance is requested**

Islamic Association of Greater Detroit, Rochester  
 Holy Family Elementary School, Rochester  
 Kimball Ice Arena, Kimball  
 Michael Chevrolet, Chesterfield Township  
 Farmington Hills Library, Farmington  
 Ypsilanti District Library, Ypsilanti  
 Lumigen Tech Center, Southfield  
 St. Elizabeth Ann Seton Parish, Troy  
 Millennium Park, Building 1, Livonia  
 Millennium Park, Building E, Livonia  
 Millennium Park, Building D, Livonia  
 Millennium Park, Building C, Livonia  
 Knob Music Theater, Clarkston  
 Sudan Corporation, Lake Orion  
**Name and address of employer**  
 Whitmore Steel

**Location for which variance is requested**

Hines Park Lincoln Mercury Dealership, Milford

**Part and rule number from which variance is requested**

Part 10 - Lifting & Digging Equipment: Rule R408.41015,  
 Rule 1015a(2)(d) & R408.41018, Rule 1018a(1)

**Summary of employer's request for variance**

To allow the use of a work platform suspended on the loadline of a crane to be used without part of the guard-rail system. The platform is used to remove concrete form work from outside the fascia beams on bridge deck pours under controlled conditions.

**Name and address of employer**

Walter Toebe Construction Company

**Location for which variance is requested**

M-30 over the Tittabawassee & Tobacco River Project,  
 #M56032-45133

**Part and rule number from which variance is requested**

Part 13 - Mobile Equipment: Ref.#1926.1000 (a) (1&2) (b)

**Summary of employer's request for variance**

To allow the employer to work under overhead conveyor obstructions in an assembly plant to dig shallow foundation pad excavations without the use of rollover equipment providing certain stipulations are adhered to.

**Name and address of employer**

Nagle Paving

**Location for which variance is requested**

Walbridge Aldinger Portfolio Parking Structure, Warren

**Part and rule number from which variance is requested**

Part 32 - Aerial Lift Platforms: R408.43209, Rule 3209

(8) (b) & R408.43209, Rule 3209 (g)

**Summary of employer's request for variance**

To allow employer to firmly secure a scaffold plank to the top of the intermediate rail of the guardrail system of an aerial lift for limited use as a work platform provided certain stipulations are adhered to.

**Name and address of employer**

John E. Green Company

**Location for which variance is requested**

Northwest Midfield Terminal Project, Detroit

**Variances Granted General Industry****Part and rule number from which variance is requested**

Part 1 - General Provisions: Rule 36(1)

**Summary of employer's request for variance**

The employer has requested to utilize a 60 PSI air nozzle for a limited length of time under controlled conditions as part of a test procedure.

**Name and address of employer**

Western Michigan University, Paper Science Division

**Location for which variance is requested**

Bigelow Annex, Kalamazoo

**Part and rule number from which variance is requested**

Part 17 - Refuse Packer Units: Rule 1732(1)

**Summary of employer's request for variance**

The employer has requested to use an interlocked gate in conjunction with stop bars and uniform trash carts in lieu of the fixed barrier.

**Name and address of employer**

Howard Miller

**Location for which variance is requested**

860 E. Main Avenue, Zeeland

# Reminder

All required MIOSHA posters are free. They are available by calling the CET Division at 517.322.1809.

If you have questions about which posters you are required to display, you can talk to a CET consultant.

There are several companies which frequently send notices to employers, reminding them of the penalties for not displaying the required posters—and offering to sell them a set of Michigan posters.

Please note—it is not necessary to pay for these posters.

## Safety, Health & Technology for the New Millennium

On December 7, 2000, more than 250 attendees, interested in improving their workplace safety and health, attended the safety conference sponsored by the **Safety Council for Southeast Michigan**

The ninth-annual conference, "Safety, Health & Technology for the New Millennium," included 30 sessions on a wide range of topics which were designed to inform attendees on the latest changes in the field of safety and health, how to meet the coming challenges, as well as, how to solve current problems. Sessions included: Supervisor's Role in Safety & Health; Response to a Chemical Explosion; Update on Infectious Diseases; Respirator Standard & Technology; Fireworks Safety for Municipalities; and Strategies for a Successful Ergonomics Program.

MIOSHA Director **Doug Earle** presented a special session covering the 25-year history of the MIOSHA program. The **General Industry Safety Standards Commission** conducted a meeting during the conference. More than 50 exhibitors introduced their state-of-the-art products and services.

For more information on the services offered by the Safety Council for Southeast Michigan, you can contact **Ed Ratzenberger** at **800.263.7130**, or you can visit their Website at: **www.safetycouncilsemi.org**.



Exhibitors at the Southeast Michigan Safety Conference.



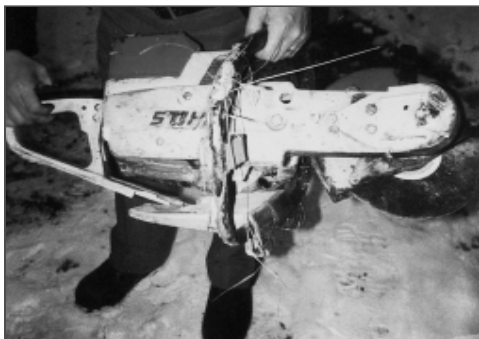
## Midland Environmental Services

Cont. from Page 1

ground storage tanks. The company's primary place of business is located at 1669 S. Isabella, Mt. Pleasant, Michigan. They are currently doing business as: Mt. Pleasant Excavating Services, Inc. The company excavates, removes, and dismantles underground storage tanks throughout the state. These tanks contain various types of gasoline and petroleum products and, once excavated, must be cleaned and purged of the contaminants before the demolition/dismantling process can begin.

On Dec. 8, 1994, Mickiel J. Rennenberg, an employee of Midland Environmental Services, Inc., was killed when an explosion occurred during a cutting operation on an underground storage tank which had previously contained a petroleum product. The explosion occurred at about 2:40 p.m. while seven Midwest Environmental Services employees were removing an old 6,000-gallon gas tank in Beaverton, Gladwin County. Three other employees were also injured, including Michael Burkett who was critically injured. On the day of the blast, Woods was on site, and was one of the three injured employees.

Midland Environmental had been contracted to remove five underground storage tanks. They had excavated all five tanks, and were in the process of cutting holes in the tanks to facilitate their removal. Workers had cut holes in two of the tanks, and were working on the third when the explosion occurred.



*This spark-producing saw was used to cut a hole in one end of the storage tanks, to prepare them for clean up.*

### The MIOSHA Investigation

A MIOSHA Safety Officer with the Construction Safety Division began the investigation of the explosion on Dec. 9, 1994, and concluded it on July 7, 1995. The MIOSHA investigator reviewed corporation documents, conducted more than 12 interviews with employees, reviewed corporate safety policy, met and conferred with local police and sheriff departments, and reviewed MIOSHA and national standards for appropriate underground tank removal and demolition.

The investigation revealed that Woods and Midland Environmental Services, Inc., (MES) knew of the substantial risk of injury to employees engaged in this type of work, and failed to use



*The Gladwin County rescue team rushes to provide emergency services at the explosion site. The two tanks on the left had been cut open and entered for clean up. During the explosion, one end of the far-right tank blew off.*

ordinary care to prevent injury to their employees. Additionally, they failed to furnish Rennenberg a place of employment free from recognized hazards that were likely to cause death or serious physical harm.

"There is no excuse for the human tragedy exhibited in this case," said BSR Director **Doug Earle**. "The mission of the MIOSHA program is to protect the safety and health of Michigan workers—and we will do everything in our power to hold employers accountable and protect working women and men."

Woods' and MES' disregard of employee safety includes, but is not limited to, the following:

- Woods and MES ignored MIOSHA safety regulations pertaining to employee training. Specifically, they knowingly assigned employees to open and enter underground storage tanks to clean and purge them without being trained on how to use and/or calibrate an explosive meter.

- Woods and MES ignored MIOSHA safety regulations requiring confined space. Specifically, they failed to instruct employees required to enter a confined space, regarding the nature of the hazards involved and the use of required protective and emergency equipment.

- Woods and MES ignored MIOSHA safety regulations that require the nozzles of air or inert gas, when used to clean or ventilate tanks and vessels that contain flammable gases or vapors, shall be bonded to the tank or vessel shell.

- Woods and MES ignored MIOSHA safety regulations that require tools used in a potentially explosive atmosphere, be designated and approved for such atmospheres. Specifi-

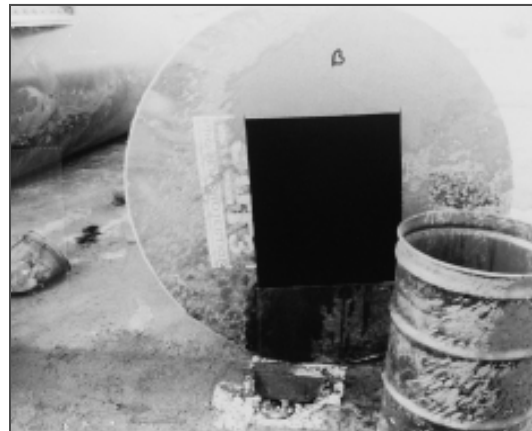
cally, they allowed the use of a gasoline-powered cutoff saw, equipped with an abrasive wheel to cut openings into the tanks, known to have contained petroleum products.

- Woods and MES ignored MIOSHA safety regulations which require that where a tank is known or suspected to contain a hazardous substance, tests shall be conducted and the hazard eliminated before demolition/dismantling is permitted to begin. Specifically, they failed to ensure that testing was conducted before cutting on the tanks, which were known to have contained gasoline/petroleum products, and they failed to eliminate the hazards.

- Woods and MES ignored MIOSHA safety regulations that require employers to develop, maintain, and coordinate an accident prevention program.

On Sept. 26, 1995, MIOSHA issued seven willful citations and one serious citation to Midland Environmental Services, Inc., with proposed penalties totaling \$427,000.

Cont. on Page 19



*After a hole was cut in the end of this tank, an employee entered the tank to clean up the residue. The 55-gallon drum and dust pan were used during residue removal.*

## Midland Environmental Services

Cont. from Page 18

### Criminal Investigation and Prosecution

According to the MIOSHA Act, every willful violation, which is connected to a fatality, is referred to the Michigan Attorney General's Office for criminal investigation and prosecution. MIOSHA pursued the criminal action through the Attorney General's Office because the employer contributed to the worker's death by willfully ignoring safety standards. When the Attorney General's Office made the decision to proceed with the criminal prosecution, the criminal and MIOSHA cases were combined.

A pre-trial hearing was held in Gladwin County District Court in November 1999, featuring several days of testimony by police officers, former workers and MIOSHA. On Nov. 18, 1999, the judge bound over Woods and Midland Environmental Services, Inc., for trial in Circuit Court on charges of involuntary manslaughter and violation of the MIOSHA code in the workplace death of an employee, Mickiel Renneberg.

MIOSHA and the Attorney General's Office worked closely and cooperatively to bring about a resolution in this criminal case. **Diane K. Phelps**, Chief of the BSR Appeals Division was instrumental in coordinating this joint endeavor with the Attorney General's Office. She worked diligently with Assistant Attorney General **Diane Smith** by providing technical expertise and knowledge of MIOSHA rules and regulations.

In court, Woods admitted he was supervising the work activities on the day of the explosion, that they were using the wrong cutting device, and that device ignited the spark which caused the explosion. Moreover, Woods admitted he was aware of the known hazards, and still allowed the work to proceed, and the failure to comply with MIOSHA rules and regulations led to the wonton and willful disregard of hazards that led to the death of Mickiel Renneberg.

In the court action, Woods and Midland Environmental also agreed to negotiate a settlement agreement with MIOSHA. This agreement will provide MIOSHA with the tools and the ability to closely monitor the company and to help ensure that their employees will be protected. The agreement will compel the company to do business correctly, and will hold them accountable for their actions. The reduction in the original proposed penalties to \$125,000 resolves the original citations issued by MIOSHA, and is based in part on two financial audits of the company.

"We are grateful to our MIOSHA staff and the Attorney General's Office for their hard work and dedication in pursuing this case—which sends a message to corporations and their owners that we may pursue similar actions against employers whose willful violations of workplace safety result in a worker's death," said BSR Director Earle. ■

## Workplace Safety Culture

Cont. from Page 4

How do you measure the cost to the individual? The employer risks product, assets or money. The employee risks mobility, permanent disability or even death. The cost is immeasurable to the individual worker as well as unacceptable and avoidable. Employees for the most part, are willing to perform their work safely and take responsibility for their own actions. It's up to their employer to assure a workplace culture where safety is an integral part of the system, not just something we do when MIOSHA comes or after an accident occurs.

OSHA recognizes the relationship of near miss to serious injury as well. It has been mandated that the MIOSHA program will target its attention to high-risk industries with a proven potential for serious and disabling injuries. Focused training, enforcement and on-site consultation efforts

have been developed to impact these industries. Employer commitment to supervisory and employee safety training and enforcement must go in concert with this effort as well.

### Help is Available

The **Consultation, Education and Training (CET) Division** is available to assist employers with their safety programs and can explain in detail any of the concepts listed in this article. The Division can be contacted at **517.322.1809**.

An employer cannot wait to incorporate safety into their operations. The challenge is to foster a workplace culture where everyone accepts responsibility for safety and pursues it on a daily basis. It must be a part of every business plan and every human plan as well. The cost in human suffering and lost potential is unacceptable. The business of safety is everyone's business! ■

## Safety & Health Programs

Cont. from Page 5

**Hazard Prevention and Control Systems** will be developed to prevent and control hazards. Activities include:

- A written system implemented to assure guards, housekeeping and personal protective equipment are essentially in place;

- Written programs and procedures are required, i.e. lockout/tagout, respirators, Right-to-Know, etc.;

- Copies of appropriate MIOSHA standards are on site or available for quick access.

And finally, **Safety and Health Training**. The goal is for companies to provide a mechanism for their employees to understand safety and health hazards, and how to protect themselves and others. Activities include:

- New employee safety orientation;

- Training which is given periodically and pertains to the hazards of the jobs;

- Training when personal protective equipment is provided;

- Training when a pattern of unsafe or unhealthy behaviors are observed.

### Program Kit Available

The above examples are just a few of the many suggestions included in the kit. The kit can be ordered by calling the **CET Division at 517.322.1809** and requesting the **Safety and Health Written Program Kit**.

To have an effective safety and health program a company needs to develop and implement a system which will allow for continued growth and changes to all of these elements. A safety and health program is not a short-term goal—it's a long-term project. In order for a safety and health program to be effective, it cannot be put on a shelf and dusted off when a "major" event occurs. It has to be used daily and incorporated into the workplace culture. ■



Lansing Center  
April 17 & 18

SAFETY FIRST IN THE 21ST

Conference and registration information is  
available on their website:

<http://www.michsafetyconference.org>

## How To Contact Us

<b>MIOSHA Complaint Hotline</b>	<b>800.866.4674</b>
<b>Fatality/Catastrophe Hotline</b>	<b>800.858.0397</b>
<b>General Information</b>	<b>517.322.1814</b>

<b>Free Safety/Health Consultation</b>	<b>517.322.1809</b>
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<b>Director</b>	<b>517.322.1814</b>	<b>Doug Earle</b>
<b>Deputy Director</b>	<b>517.322.1817</b>	<b>Deborah Grether</b>
<b>Deputy Director</b>	<b>517.322.1817</b>	<b>Doug Kalinowski</b>

<b>DIVISION</b>	<b>PHONE</b>	<b>CHIEF</b>
<b>Appeals Division</b>	<b>517.322.1297</b>	<b>Diane Phelps</b>
<b>Construction Safety Division</b>	<b>517.322.1856</b>	<b>Richard Mee</b>
<b>Consultation Education &amp; Training Division</b>	<b>517.322.1809</b>	<b>Maryann Markham</b>
<b>Employee Discrimination Division</b>	<b>248.888.8777</b>	<b>Jim Brogan</b>
<b>General Industry Safety Division</b>	<b>517.322.1831</b>	<b>Martha Yoder</b>
<b>Information Division</b>	<b>517.322.1851</b>	<b>Ron Morris</b>
<b>Occupational Health Division</b>	<b>517.322.1608</b>	<b>John Peck</b>
<b>Standards Division</b>	<b>517.322.1845</b>	<b>Connie Munsch</b>
<b>Wage &amp; Hour Division</b>	<b>517.322.1825</b>	<b>Bill Strong</b>

**Website: [www.cis.state.mi.us/bsr](http://www.cis.state.mi.us/bsr)**

If you would like to subscribe to the MIOSHA News, please contact us at 517.322.1809 and provide us with your mailing address. Also if you are currently a subscriber, please take the time to review your mailing label for errors. If any portion of your address is incorrect, please contact us at the above number.



**Consumer & Industry Services  
Bureau of Safety & Regulation  
Director: Douglas R. Earle**

MIOSHA News is a quarterly publication of the Bureau of Safety & Regulation, which is responsible for the enforcement of the Michigan Occupational Safety and Health Act (MIOSHA).

The purpose is to educate Michigan employers and employees about workplace safety and health. This document is in the public domain and we encourage reprinting.

**Editor: Judith Keely Simons**

**Consumer & Industry Services  
Director: Kathleen M. Wilbur**



**Serving Michigan...Serving You  
Consumer & Industry Services**

**Consumer & Industry Services  
Bureau of Safety & Regulation  
P.O. Box 30643  
7150 Harris Drive  
Lansing, Michigan 48909-8143**

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